Remarks

In the Office Action mailed November 3, 2004, the Examiner acknowledged that applicant's arguments filed August 8, 2004 were successful in overcoming all rejections pending as of the Office Action dated February 2, 2004, and accordingly withdrew of all outstanding rejections. However, in the Office Action mailed November 3, 2004, the Examiner raised new rounds of rejection. Specifically, claims 1, 37, 38, 44, 51 and 52 were rejected under 35 U.S.C. § 112, first paragraph, for lack of enablement and under 35 U.S.C. § 112, second paragraph, for indefiniteness. Claims 2-5, 7-36, 39-42, 46-50, 53, and 54 are objected to as being dependent upon a rejected base claim. The specific grounds for rejection, and Applicants' response thereto, are set out in detail below.

Claims 1-5, 7-42, 44, and 46-54 are pending for reconsideration, which is respectfully requested in view of the foregoing amendments and following remarks.

Rejection under § 112, first paragraph

Claims 1, 37, 38, 44, 51, and 52 are rejected under 35 U.S.C. § 112, first paragraph, because the specification allegedly does not enable (1) all therapeutic agents and (2) all marker substances produced by or associated with a tumor. Applicants respectfully traverse.

The enablement requirement of § 112, first paragraph requires only that the specification reasonably apprise those skilled in the art how to make and use the invention, and an application is presumed as a matter of law to be enabling. It is the Examiner's burden to overcome that presumption. The Examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. In re Wright, 999 F.2d 1557, 1562 (Fed. Cir. 1993) (emphasis added). At a minimum, the examiner must give reasons for the uncertainty of the enablement. MPEP § 2164.04 (Rev. 1, Feb, 2003).

The MPEP further counsels that working examples are not per se required to satisfy the enablement requirement. See MPEP § 2164.02; see also Gould v. Quigg, 822 F.2d 1074, 1078 (Fed. Cir. 1987). The proper standard, instead, is whether the application teaches skilled workers in the field how to make and use the claimed invention in a manner that is commensurate with the scope of the claims. The applicants respectfully urge that applicants' specification meets this standard.

The instant Office Action fails to set forth a reasonable basis to question enablement of the claimed invention and therefore fails to meet the standard required under § 112. In essence, the Office Action contains no "positive" evidence that the full scope of the invention is not enabled by the Specification. There is nothing on the record, for example, describing why one of skill in the art would not be able to determine, based on the applicant's disclosure and application of no more than routine knowledge in the art, the scope of therapeutic agents and marker substances that would be used in the present invention.

Although the Examiner list the Wands factors and provides a brief comment for each factor, the office action provides no scientific basis for the assertion that the specification fails to provide guidance regarding which therapeutic agents and marker substances would be used in the present invention or that there is little predictability in performing the claimed invention.

In fact, the Examiner concedes that the there is sufficient guidance in specification for the use of several therapeutic agents, including radionuclides, cytokines, drugs, toxins, and boron addends (see Office Action at ¶ 5). The specification also teaches that the delivered therapeutic may be a cytokine, lymphokine, chemokine, or immunomodulator, (see page 12, lines 10-11). Additionally, the specification at page 17 (last paragraph) details the contemplated therapeutic agents:

> **"Therapeutic Agents**
> The first and second therapeutic agents may be the same or different, and may be, for example, therapeutic radionuclides, drugs, hormones, hormone antagonists, receptor antagonists, enzymes or proenzymes activated by another agent, autocrines or cytokines. Toxins also can be used in the methods of the present invention. Other therapeutic agents useful in the present invention include anti-DNA, anti-RNA, radiolabeled oligonucleotides, such as anti-sense oligodeoxy ribonucleotides, anti-protein and anti-chromatin cytotoxic or antimicrobial agents. Other therapeutic agents are described in the aforementioned U.S. patents and patent applications or are known to those skilled in the art, and the use of such other therapeutic agents in accordance with the present invention is specifically contemplated."

Applicants submit that, based on their disclosure, one skilled in the art readily would understand that the claimed therapeutic agents would include any therapeutic agent capable of treating a tumor or cancer cells. Because the present invention is directed at improving the delivery and efficacy of various therapeutic agents with tumor-killing capabilities (see page 1,

first paragraph of the disclosure), it would be understood by any skilled artisan that the present invention would include all available therapeutic agents.

Regarding enablement for marker substances, the disclosure states that a marker substance is produced by or associated with said tumor (see specification at page 10, lines 10-13). More specifically, the disclosure provides that in the treatment of tumors, the marker substance can be any substance produced by or associated with or on the surface of a tumor or cancer cell (see specification at page 4, lines 10-13; page 15, lines 2-22). Applicants' disclosure makes it clear that the claimed invention involves improved methods for targeting tumor cells by selectively binding to any tumor-produced or tumor-associated substance - i.e., a "marker substance." Applicants submit that because of the nature of the claimed invention, the explanation in the disclosure that a marker substance can be any substance that is produced by or associated with the target site provides adequate guidance to the skilled artisan in carrying out the claimed invention. In sum, applicants submit that the skilled artisan would have no difficulty understanding the scope of the term marker substance, as applied to the instance claims, in view of their disclosure.

Based on these teachings of the instant disclosure, applicants respectfully submit that the skilled artisan would have been able to carry out the claimed invention by employing no more than routine experimentation. This is all that is required by § 112, first paragraph. Accordingly, applicants respectfully submit that the specification fully enables the claimed methods and request withdrawal of the rejection.

Rejection under § 112, second paragraph

The Examiner alleges that claims 1, 37, 38, 44, 51, and 52 are indefinite under 35 U.S.C. § 112, second paragraph. Specifically, the Examiner states that one of ordinary skill in the art would not be able to ascertain what marker substances is/are being claimed. Applicants respectfully traverse the rejection.

For definiteness, a claim need only reasonably apprise those skilled in the art of the utilization and scope of the invention. *Hybritech, Inc. v. Monoclonal Antibodies,* 231 USPQ 81, 94-95 (1986). Claims are to be given their broadest reasonable interpretation consistent with applicants' specification. *See* MPEP § 2111. In sum, in order to reject the claims on definiteness

grounds, it is incumbent on the examiner to show how and why the skilled person having applicants' specification would not be apprised of the invention by the language-at-issue.

Further, the PTO explicitly sanctions the practice of allowing the applicants to define terms of his invention in the specification. See MPEP § 2173 ("[Applicants] can define in the claims what they regard as their invention essentially in whatever terms they chose so long as the terms are not used in ways that are contrary to accepted meanings in the art... a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought."). Applicants note that "applicants are their own lexicographers [and] can define in the claims what they regard as their invention..." (MPEP § 2173.01 July, 1998). Accordingly, inasmuch as the specification adequately defines a claim term, an indefiniteness rejection under 35 U.S.C. § 112, second paragraph, is improper.

The Examiner alleges that the claims as written are ambiguous because one cannot readily ascertain what marker substance or group of substances is/are being claimed. However, the specification clearly defines a marker substance as "a molecule associated with, produced by or on the surface of the tumor or infectious disease causing agent, or on a component of the second conjugate." (see specification at page 4, lines 10-13).

Applicants respectfully submit that one skilled in the art would understand, based on this definition provided in the specification, read in conjunction with applicants' disclosure, that the claimed marker substance can be any substance produced by, associated with or present on the surface of a tumor cell. Because of the nature of the claimed invention, it is neither practical nor necessary to limit the marker substance to a particular entity; rather the marker substance will be defined by its production by, association with or attachment to the surface of a tumor cell.

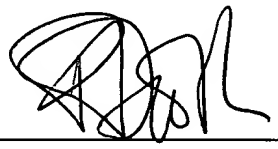
In light of the clear disclosure of the instant specification, applicants respectfully submit that the allegedly objectionable term is clear and definite, and the skilled worker would be able to determine the metes and bounds of the phrase "marker substance" as presented in claims 1, 37, 38, 44, 51, and 52. Accordingly, one skilled in the art is fully apprised of the scope and meaning of the phrase and withdrawal of the rejection respectfully is requested. As such, claims 1, 37, 38, 44, 51, and 52 fully comply with § 112, second paragraph, and withdrawal of the rejection is requested.

CONCLUSION

In view of the above remarks and amendments, it is respectfully submitted that this application is in condition for allowance. Early notice to that effect is earnestly solicited. The Examiner is invited to telephone the undersigned at the number listed below if the Examiner believes such would be helpful in advancing the application to issue.

If any additional fees are required for the filing of this paper, applicants authorize the Commissioner to charge any deficiency to Deposit Account No. 08-1641.

Respectfully submitted,



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By _____

Customer No. 26633
HELLER EHRMAN WHITE &
MCAULIFFE LLP
1666 K Street, N.W., Suite 300
Washington, DC 20006
Telephone: (202) 912-2000
Facsimile: (202) 912-2020

Paul M. Booth
Attorney for Applicant
Registration No. 40,244